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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Hiroshi Yamada

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EXAMINER

WOOD, JR, STEVEN A

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2462

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,452	Applicant(s) YAMADA ET AL.	
	Examiner STEVEN WOOD	Art Unit 2462	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19,20 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19,20 and 23-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION
RESPONSE TO AMENDMENT

1. This action is in response to the request for re-consideration of Application No. **10/577452**, filed **09/01/2009**.
2. **Claims 1 – 18, 21, 22** are canceled. **Claims 19, 20, 23 – 34** are pending. **Claims 19, 29 – 43** have been amended.
3. Applicant argues with respect to **claims 19, 30 – 34**, see third full Par. Pg. 10 and first full Par. Pg. 11 Applicant's Remarks, that these claims have been amended to include limitations not found in the prior art of record in Examiner's rejection. Examiner has fully considered Applicant's arguments and agrees that the independent claims have been sufficiently modified to justify withdrawal of Examiner's former rejections. However, upon further consideration, Examiner provides new grounds of rejection as necessitated by the change in scope of the claims effectuated by Applicant's amendments.
4. Applicant argues with respect to **claims 20, 25**, see second full Par. Pg. 12 Applicant's Remarks, that the combination of references used in rejection of these claims do not cure the deficiencies of the primary references used in rejection of the independent claims. Examiner has fully considered Applicant's arguments and agrees that these dependent claims have been sufficiently modified to justify withdrawal of Examiner's former rejections. However, upon

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further consideration, Examiner provides new grounds of rejection as necessitated by the change in scope of the claims effectuated by Applicant's amendments.

5. Applicant argues with respect to **claims 27, 28**, see first full Par. Pg. 13 Applicant's Remarks, that the combination of references used in rejection of these claims do not cure the deficiencies of the primary references used in rejection of the independent claims. Examiner has fully considered Applicant's arguments and agrees that these dependent claims have been sufficiently modified to justify withdrawal of Examiner's former rejections. However, upon further consideration, Examiner provides new grounds of rejection as necessitated by the change in scope of the claims effectuated by Applicant's amendments.

6. Applicant argues with respect to **claim 29**, see first full Par. Pg. 14 Applicant's Remarks, that the combination of references used in rejection of these claims do not cure the deficiencies of the primary references used in rejection of the independent claims. Examiner has fully considered Applicant's arguments and agrees that these dependent claims have been sufficiently modified to justify withdrawal of Examiner's former rejections. However, upon further consideration, Examiner provides new grounds of rejection as necessitated by the change in scope of the claims effectuated by Applicant's amendments.

7. **Claims 19, 20, 23 – 34** are rejected. This action is non-final as required by Examiner's presentation of a new grounds for rejection of claims under 35 USC § 101, 112 as comprising non-statutory subject matter and unclear subject matter.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 31 and 34** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10. **Claims 31, 34** recite the limitation of “a computer readable medium” in the preambles of the respective claims. As described in the specification (see Par. 26), this computer readable medium consists of “a computer-readable recording medium,” which fails to exclude signals, carrier waves, and other non-statutory forms of energy because according to patent office interpretation a carrier wave can temporarily store transitory information. The office currently prefers the terminology “a non-transitory computer readable storage medium” to effectively exclude non-statutory subject matter.

However, the claim language as presented permits an overly broad interpretation such that “computer readable medium” could potentially include non-statutory subject matter of the types mentioned above. Examiner suggests that Applicant amend claims 31, 34 to include the above indicated office preferred terminology, based on applicant’s disclosure of ROM 102, to prevent such an overly broad reading of these claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

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11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. **Claims 19, 20, 23, 26 – 30, 32, 33** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. **Claim 19** recites the limitation of “a terminal apparatus connected to a network and configured to perform an operation.” The specification discloses the terminal apparatus as computer software. Specifically, at Par. 42, “the terminal apparatus 2 is set... through the control of software” and at Par. 66, “a control program of an apparatus.” As such, claim 19 lacks any discernible structure which implements the control software of the terminal apparatus or upon which such control software is executed. Therefore, claim 19 is rejected as being indefinite. Appropriate correction is required.

14. **Claims 20, 23, 26, 27, 28, 29** depend ultimately from claim 19 and are likewise rejected based on Examiner’s interpretation of the terminal apparatus because they do not cure the structural deficiencies of claim 19. Claims 20, 23, 26, 27, 28, 29 are rejected as being indefinite. Appropriate correction is required.

15. **Claim 30** also recites the limitation of “a terminal apparatus” and a control method thereof. Similarly to claim 19, Claim 30 also fails to disclose any discernible structure which

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implements the method or upon which the control method is performed. Therefore, claim 30 is also rejected as being indefinite. Appropriate correction is required.

16. **Claim 32** recites the limitation of “a plurality of terminal apparatuses.” Again, based on Examiner’s interpretation of the lack of any discernible structure in claim 32 which implements the control software of the terminal apparatus or upon which such control software is executed, claim 32 is rejected as being indefinite. Appropriate correction is required.

17. **Claim 33** also recites the limitation of “a plurality of terminal apparatuses” and a control method thereof. Similarly to claim 32, Claim 33 also fails to disclose any discernible structure which implements the method or upon which the control method is performed. Therefore, claim 33 is also rejected as being indefinite. Appropriate correction is required.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. **Claims 19, 23, 24, 26, 30 – 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Murai, Hirasawa, and Cheng, in view of Cheng, et al., (US 6810263 B1) (hereinafter Cheng).

20. Regarding **claims 19, 30 – 34**, Murai discloses a terminal apparatus connected to a network and configured to perform an operation (claim 19), a control method of the terminal apparatus (claim 30), a computer readable medium with code embodied therein for performing the control method (claim 31), a network system including a plurality of terminal apparatuses connected to a network (claim 32), a control method of a network system including a plurality of terminal apparatuses connected to a network (claim 33), and a computer readable medium with code embodied therein for performing a control method of a network system including a plurality of terminal apparatuses connected to a network (claim 34), each terminal apparatus comprising and the control method of the terminal apparatus and the control method of the network system comprising the steps of: a packet volume detecting unit (claim 19, 32) detecting (claims 19, 30, 31, 32, 33), in each of the plurality of terminal apparatus (claims 33, 34), a number of packets received from the network in a predetermined time (claims 19, 30 - 34), (Fig. 1; Col. 9, lines 20 – 24; multicast packet count section 106 (**a packet volume detecting unit**) is provided to the terminal, and counts the number of multicast packets (**configured to detect a number of packets received from the network**) from the beginning of multicast in a given group until a predetermined period of time elapses (**in a predetermined time**)).

Murai does not explicitly teach *a logical disconnecting unit (claim 19, 32) logically disconnecting (claims 19, 30 - 34) the terminal apparatus (claims 19, 30, 31, 32) a corresponding terminal apparatus (claim 33, 34) from the network when the number of packets detected (claims 19, 30 - 34) by the packet volume detecting unit (claim 19, 32) exceeds a predetermined value (claims 19, 30 - 34), and a reconnecting unit (claim 19, 32) reconnecting*

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(claims 19, 30 - 34) the terminal apparatus (claims 19, 30, 31, 32) the corresponding terminal apparatus (claim 33, 34) when a return interval time has passed after the terminal apparatus was disconnected from the network (claims 19, 30 - 34) by the logical disconnecting unit (claim 19, 32).

Hirasawa explicitly discloses a logical disconnecting unit (claim 19, 32) logically disconnecting (claims 19, 30 - 34) the terminal apparatus (claims 19, 30, 31, 32) a corresponding terminal apparatus (claim 33, 34) from the network when the number of packets detected (claims 19, 30 - 34) by the packet volume detecting unit (claim 19, 32) exceeds a predetermined value (claims 19, 30 - 34), (Col. 6, line 65 – Col. 7, line 2; after having been informed that the failure detecting section 15 has detected a network failure such as a meltdown or a broadcast storm, **(when the number of packets detected by the packet volume detecting unit exceeds a predetermined value)** the logical connecting/disconnecting section 19 **(a logical disconnecting unit)** logically disconnects the computer system 1 **(configured to logically disconnect the terminal apparatus)** from the LAN control device 3 **(from the network)**).

And a reconnecting unit (claim 19, 32) reconnecting (claims 19, 30 - 34) the terminal apparatus (claims 19, 30 - 32) the corresponding terminal apparatus (claim 33, 34) when a return interval time has passed after the terminal apparatus was disconnected from the network (claims 19, 30 - 34) by the logical disconnecting unit (claim 19, 32), (Col. 7, line 57 – Col. 8, line 2; failure detecting section 15 detects a broadcast storm and informs the connection instructing section 17. Connection instructing section 17 actuates the timer 18. When the set time on the timer 18 has expired **(when a return interval time has passed)**, the connection instructing section 17 issues a connection instruction to the logical connecting/disconnecting section 19 to

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rejoin the computer system 1 to the network (**after the terminal apparatus was disconnected from the network by the logical disconnecting unit**). This permits the logical connecting/disconnecting section 19 (**a reconnecting unit**) to logically connect the computer system 1 (**configured to reconnect said terminal apparatus**) to the LAN control system 3 (**to said network**) for restoration to its original state).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Murai by incorporating the teaching of Hirasawa to provide a computer system that is able to inform the computer personnel of the failure whenever a network failure, such as the abnormal appearance of broadcast packets, has taken place, or its signs have appeared, and then logically disconnect itself from the LAN, and to provide a computer system capable of logically connecting itself to the LAN after the network failure has been removed (Hirasawa; Col. 1, line 66 – Col. 2, line 6).

The combined teaching of Murai and Hirasawa discloses when the number of packets (claims 19, 30 - 34) detected (claims 19, 30 - 34) by the packet volume detecting unit (claims 19, 32), (Murai; Fig. 1; Col. 9, lines 20 – 24; multicast packet count section 106 is provided to the terminal, and counts the number of multicast packets from the beginning of multicast), for a first time (claims 19, 32) after the reconnection (claim 19, 30 - 34), exceeds the predetermined value (claims 19, 30 - 34), (Hirasawa: Col. 7, lines 64 – 67; connection instructing section 17 issues a connection instruction to the logical connecting/disconnecting section 19 to rejoin the computer system 1 to the network; Col. 8, lines 4 – 7; if the broadcast storm still continues at the time when the set time expires (**for a first time after reconnection**), the failure detecting section 15 detects the failure again (**number of packets exceeds the predetermined value**)).

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The combined teaching of Murai and Hirasawa does not explicitly teach *wherein the reconnecting unit increases (claim 19, 32) the return interval time (claims 19, 30 - 34) is increased (claim 30, 31, 33, 34) from the return interval time at the immediately preceding disconnection, and when the increased return interval time reaches an upper limit value (claims 19, 30 - 34), the reconnecting unit (claim 19, 32) maintaining the return interval time at the upper limit value (claims 19, 30 - 34).*

Cheng explicitly discloses wherein the reconnecting unit increases (claim 19, 32) the return interval time (claims 19, 30 - 34) is increased (claim 30, 31, 33, 34) from the return interval time at the immediately preceding disconnection, (Fig. 2; Col. 3, lines 60 – Col. 4, line 1; mobile station 106 initializes a reconnect timer and waits for the time out. After the timer has elapsed, mobile station 106 again attempts to connect to the base station 104 and determines whether service has been connected or rejected; Col. 4, line 6 – 9; and if the connection is unsuccessful, the mobile station 106 determines whether the timer is at the maximum allowable value; Col. 4, lines 13 – 17; if the time is not at the maximum value, the mobile station 106 quadruples the value of the timer. After quadrupling the timer value, the mobile station waits for the timer to time out).

And when the increased return interval time reaches an upper limit value (claims 19, 30 - 34), the reconnecting unit (claim 19, 32) maintaining the return interval time at the upper limit value (claims 19, 30 - 34), (Col. 4, lines 10 – 12; if the timer is at the maximum value, the mobile station 106 proceeds along the YES branch to state 235, where the mobile station waits for the timer to time out).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai, Hirasawa, and Cheng by incorporating the teaching of Cheng to provide a system that allows the system users to wait for a free channel to connect to the system while reducing the probability of reconnection collision with other system users (Cheng; Col. 1, lines 64 – 67).

21. Regarding **claim 23**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng discloses the terminal apparatus, further including: an inputting device for inputting a connection request for connecting said terminal apparatus to said network, (Hirasawa: Fig. 1; Col. 4, lines 18 – 21; a connection instructing section 17 for receiving a logical connection request (**for inputting a connection request**) from the input/output device 12 (**an inputting device**) and then issuing a connection instruction to a logical connecting/disconnecting section 19 (**for connecting said terminal apparatus to said network**)).

22. Regarding **claim 24**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng discloses the terminal apparatus, further including: a display device for displaying the fact that said terminal apparatus is disconnected, (Hirasawa: Col. 7, lines 29 – 33; informing section 16 allows the input/output device 12 (**a display device**) to display a message that a network failure has occurred (**for displaying the fact that said terminal apparatus is disconnected**), and the packet transferred from the detecting section 15 (that is, the packet flowing over the LAN at that time).

23. Regarding **claim 26**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng discloses the terminal apparatus, wherein said packet volume detecting unit does not detect said number of packets when the terminal apparatus is logically disconnected from said network, (Murai: Fig. 1; Col. 6, lines 2 – 12; information communication terminals 100, 110a, 110b, 120a, and 120b such as personal computers and the like, terminals 100, 110a and 110b mainly comprise communication section 101, multicast section 103, and multicast packet count section 106 (**considering Murai Fig. 1 and description of the terminals as including the packet count section, examiner concludes that in accordance with the combined teaching of Murai, Hirasawa, and Cheng, said packet packet volume detecting unit *INHERENTLY* does not detect said number of packets when the terminal apparatus is logically disconnected from said network**)).

24. **Claims 20, 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Murai, Hirasawa, and Cheng, in view of Burrows, et al., (US 20020073338 A1) (hereinafter Burrows).

25. Regarding **claim 20**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng discloses the logical disconnecting unit logically disconnects the terminal apparatus from the network when the number of packets received in a predetermined time exceeds a predetermined value, (Hirasawa: (32) After having been informed that the failure detecting section 15 has detected a network

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failure such as a meltdown or a broadcast storm, (**when the number of packets detected by the packet volume detecting unit exceeds a predetermined value**) the logical connecting/disconnecting section 19 (**a logical disconnecting unit**) logically disconnects the computer system 1 (**configured to logically disconnect the terminal apparatus**) from the LAN control device 3 (**from the network**)).

The combined teaching of Murai, Hirasawa, and Cheng does not explicitly teach *the terminal apparatus, wherein the packet volume detecting unit detects the number of only those broadcast packets among packets received by the terminal apparatus.*

Burrows explicitly discloses the terminal apparatus, wherein the packet volume detecting unit detects the number of only those broadcast packets among packets received by the terminal apparatus (paragraph 39; packet traffic monitor learns about the per-port ingress packet counters in the switches and it can poll such counters order to observe the number of broadcast packets).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai, Hirasawa, and Cheng by incorporating the teaching of Burrows to limit the impact of undesirable behavior of computers on a shared data network through which packets of data are passing to all its computers (Burrows; paragraph 30).

26. Regarding **claim 25**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng discloses the terminal apparatus, further including: a display device for displaying the history information, (Hirasawa: (34) the informing section 16 allows the input/output device 12 (**a display device**) to display a

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message that a network failure has occurred (**for displaying the fact that said terminal apparatus is disconnected – Examiner notes that it is an obvious extension to display how many times said terminal apparatus has been disconnected during a recent timeframe, i.e. the history information**), and the packet transferred from the detecting section 15 (that is, the packet flowing over the LAN at that time).

The combined teaching of Murai, Hirasawa, and Cheng does not explicitly teach *the terminal apparatus, further including: a unit for storing history information about disconnection and reconnection of said terminal apparatus.*

Burrows explicitly discloses the terminal apparatus, further including: a unit for storing history information about disconnection and reconnection of said terminal apparatus, (paragraph 45; a skeptic (**a unit for storing history information**) is used when a fault monitor, separate or integral to the skeptic, recognizes a "broken" component or connectivity (or link). Thus, often or intermittently broken components are "removed" from the network for progressively longer periods of time, and "repaired" components eventually "forget" their failed history. In one embodiment, the good history can be classified as skepticism level zero (0). Failure cycles in greater numbers increase the skepticism level (**history information about disconnection and reconnection of said terminal apparatus**)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai, Hirasawa, and Cheng by incorporating the teaching of Burrows to limit the impact of undesirable behavior of computers on a shared data network through which packets of data are passing to all its computers (Burrows; paragraph 30).

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27. **Claims 27 & 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Murai, Hirasawa, and Cheng, in view of Foschiano, et al., (US 20040022253 A1) (hereinafter Foschiano).

28. Regarding **claim 27**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng does not explicitly teach *the terminal apparatus, further including: a first changing unit configured to change said predetermined value in accordance with a processing load required via said network,*

Foschiano explicitly discloses the terminal apparatus, further including: a first changing unit configured to change said predetermined value in accordance with a processing load required via said network, (Figs. 5 & 8; paragraph 42; by shutting down a port transmitting large volumes of such packets, or other appropriate response, this prevents packet storms, and the overload of the inspection engine analyzing such packets, **(in accordance with a processing load required via said network)**; paragraph 55; a processor 520 **(a first changing unit)** (in the manner of inspection engine 470 of FIG. 4B); paragraph 63; a determination as to whether the total number of such packets have exceeded a limit, which may be pre-set or dynamic (step 800) **(configured to change said predetermined value)**. As noted previously, an advantage of such software-based analysis is the ability to dynamically respond to varying packet traffic conditions, and so take into account network conditions when performing such analyses).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai, Hirasawa, and Cheng by incorporating the teaching

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of Foschiano to protect against “man in the middle” and other types of network attacks (Foschiano; paragraphs 10 & 20).

29. Regarding **claim 28**, the rejection of claim 27 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng does not explicitly teach *the terminal apparatus, wherein said first changing unit changes said predetermined value in accordance with a transition of said processing load required via said network*.

Foschiano explicitly discloses the terminal apparatus, wherein said first changing unit changes said predetermined value in accordance with a transition of said processing load required via said network, (Figs. 5 & 8; paragraph 55; a processor 520 (**said first changing unit**) (in the manner of inspection engine 470 of FIG. 4B); paragraph 63; a determination as to whether the total number of such packets have exceeded a limit, which may be pre-set or dynamic (step 800) (**changes said predetermined value**). As noted previously, an advantage of such software-based analysis is the ability to dynamically respond to varying packet traffic conditions (**in accordance with a processing load required via said network**), and so take into account network conditions when performing such analyses).

30. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Murai, Hirasawa, and Cheng, in view of Yang, et al., (US 20040193719 A1) (hereinafter Yang).

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31. Regarding **claim 29**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai, Hirasawa, and Cheng does not explicitly teach *the terminal apparatus, further including: a second changing unit configured to change said predetermined value in accordance with a status of said network.*

Yang explicitly discloses the terminal apparatus, further including: a changing unit configured to change said predetermined value in accordance with a status of said network, (Fig. 2; paragraph 15; packet counter counts the number of packets removed from the transmission buffer 122 and transmitted from the base station transmission system (BTS) 120 to access terminals (ATs) 130 since the last flow control message was sent. BTS 120 (**changing unit**) dynamically establishes the packet count threshold (**configured to change said predetermined value**) based on the status (occupancy or availability) of the transmission buffer 122 (**in accordance with a status of said network**)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai, Hirasawa, and Cheng by incorporating the teaching of Yang to regulate the rate of data flow while not causing either an overflow or underflow in a network communication device (Yang; paragraph 4).

Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Wood whose telephone number is (571) 270-7318. The examiner can normally be reached on Monday to Friday 8:00 AM to 4:00 PM.

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If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Seema Rao, can be reached at the following telephone number: (571) 272-3174.

The fax phone number for the organization where this application or proceeding is assigned is (571) 270-8318. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/S.W./
January 19, 2010
Steven A. Wood
Examiner
Art Unit 2462

/Donald L Mills/
Primary Examiner, Art Unit 2462